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ABSTRACT

This report provides a systematic evaluation of the role played by Federal funds in the total local-State-Federal complex of educational finance. The study, conducted by examining 573 school districts in five urbanized States, reports on a 4-year period, beginning with the 1965 fiscal year. The investigation revealed that rural areas receive more aid proportionately than do metropolitan areas, that many individual programs give more help to rich districts than they do to poor ones, and that uneven fund flows from year to year make it difficult for administrators to plan effectively. The report concludes that although overall federal aid tends to be allocated in greater proportion to districts with below-everage incomes and above-average ratios of non-white students, these attempts at equity are insufficient to overcome the national maldistribution of educational funds. (JF)

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THE PATTERN OF ALLOCATION OF FEDERAL AID TO EDUCATION

A Paper Presented Before The

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by

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Federal aid to education has probably stimulated more controversy per dollar than has any other domestic aid program. Over its long history, debates over federal support for education have pinched the most sensitive nerves of the American body politic, the nerves of religion, race, and states rights. Frequently, those debates have been couched in terms of educational finance.

Unfortunately, these debates and discussions are handicapped by critical gaps in knowledge. At present there is a deplorable paucity of useful information available to anyone -- public official, researcher, educator, or interested citizen -- who seeks to understand the fiscal impact of the federal contribution to educational finance.

The frustration of a recent panel of academic experts and top education officials, the Urban Education Task Force of the Department of Health, Education, and Welfare is symptomatic: "The difficulties encountered by the committee and others in focusing attention on the aggregate impact of federal aid on a particular type of local district, say urban districts, underscores the presently fragmented patterns of thinking about federal aid to education. Federal policy toward a particular district is primarily a function of the relative distribution of federal dollars; today, we discuss future policy without really knowing what present policy is."

Our report* attempts a systematic evaluation of the role

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*This paper excerpts and summarizes parts of a larger study by the same authors, Federal Aid to Public Education: Who Benefits?, prepared under Ford Foundation Grant 690-0506.

that federal funds are playing in the total local-state-federal complex of educational finance.

Scope of the Study

Two related but separate research techniques have been utilized in this study. First, to analyze the fiscal context of urban education, we have sought to relate the financing of education to general trends in population movement, business conditions, and governmental finances in thirty-seven large metropolitan areas. Second, in order to assess the impact of federal aid to education, we have conducted an intensive investigation of the distribution of federal aid to a large sample of school districts in five industrialized states. This paper will present only a brief summary of the first of these approaches under the subheading, "The Fiscal Context of Urban Education," and will focus primarily on the impact of federal aid.

Research on the allocation of federal aid to education was conducted by examining 573 school districts located in the five urbanized states. The sample was designed to insure that all larger school systems were included in its coverage. It contains better than half the pupils in the five states. Our data and conclusions, therefore, are primarily applicable to the cities, suburbs, and rural portions of these industrialized, largely metropolitan states where more than two-thirds of the nation reside. Although our primary interest is in those metropolitan areas, sufficient diversity exists in our sample school districts to draw some conclusions about the impact of federal aid in non-metropolitan areas as well.

Special emphasis in our report is placed upon states as units of analysis. Most similar studies of national policy base their analyses on samples constructed as microcosms of the nation, giving attention to regional representativeness, but seldom seeking to include sub-samples accurately representative of constituent states. Our concern, however, is with studying the units that make decisions on the allocation of federal aid to school districts. Since the federal statutes, regulations, and administrative practices place major responsibility on state education departments for making those allocations, states are obvious units for such a study. Furthermore, since we are interested in the interrelationship of local, state, and federal finance, our analysis must contain units representative of these different systems of educational support. Since states take distinctive approaches to raising and distributing revenues for their public schools, it is appropriate to select states as analytical units for that reason as well.

The study reports on a four-year period, beginning with the 1965 fiscal year and continuing through the 1968 fiscal year. The starting point provides a baseline just prior to the large increase in federal education spending that came with the implementation of the Elementary and Secondary Education Act of 1965. The use of the three succeeding years permits us largely to overcome interpretive difficulties caused by the unevenness and bunching of federal fiscal flow in any one year, and allows us to see trends over time. It is worth noting, too, that changes in the levels and purposes of federal appropriations for elementary and secondary education have been minor in the two

fiscal years that have followed those studied, so that our data and conclusions remain characteristic of the present system of federal aid to education.

All federal aid for elementary and secondary education reported by the school districts in our sample were included in the analysis. Eight major programs of aid were examined individually. They represent more than 80 percent of total federal revenues for elementary and secondary education, and more than 95 percent of such revenues actually going to school districts. (Headstart and other OEO programs, which account for an additional 15 percent of federal revenue for elementary and secondary education, are often channeled through poverty agencies.) The remaining 4 percent consists of federal funds usually reported in a residual or miscellaneous category by local districts.

The eight major programs are:

(1) Title I of the Elementary and Secondary Education Act of 1965 (ESEA), financial assistance to local educational agencies for the education of children of low-income families;

(2) Title II of ESEA, school library resources, textbooks, and other instructional materials;

(3) Title III of ESEA, supplementary educational centers and services;

(4) Title III of the National Defense Education Act of 1958 (NDEA), financial assistance for strengthening instruction in science, mathematics, modern foreign languages, and other critical subjects;

(5) Title V-A of NDEA, guidance, counseling, and testing;

(6) Vocational Education (aid for vocational education from all federal programs);

(7) School Lunch and Milk Program; and

(8) School Assistance in Federally Affected Areas, including Public Law 874 (general aid to offset increased school costs related to federal employees) and Public Law 815 (school construction money for similar purposes).

Our original intention had been to trace payments to school districts from each federal program providing assistance for elementary and secondary education. Initial conferences with state and federal officials and surveys of fund reporting however, quickly demonstrated that information was unavailable on many of the smaller programs -- at least by any research techniques that could be undertaken within reasonable time and expense limits. Allotments to states could be found, but the receipts by school districts were lumped together -- and therefore lost individually -- in such categories as "all other" or "miscellaneous outside revenues."

Some important programs proved impossible to trace to the district level within acceptable ranges of accuracy and effort. Headstart expenditures, for example, were often allotted to prime contractors by the Office of Economic Opportunity, and then subcontracted. The final point of expenditure often went unreported, so that actual time periods and expenditures could not be ascertained with sufficient precision for our purposes. In addition, Headstart amounts expended by public school authorities were frequently but a small proportion of Headstart monies being expended within the school districts. It seemed necessary, therefore, to omit expenditures for Headstart from our study.

One final word of caution should be stated for those who

have not had experience with educational finance data. Despite rigorous efforts and substantial resources, we experienced enormous difficulty collecting and comparing data, even for jurisdictions as large as school districts. In our survey differences in reporting among districts within states and among states themselves posed constant problems. There are neither uniform definitions nor common sources of educational information. For example, methods of counting attendance vary significantly from state to state. In a number of districts the category of "all other federal aid" is larger than the combined aid from specific titles. Furthermore, even though our sources of information were the official figures reported to state educational agencies by local school districts, project researchers uncovered a number of inaccuracies and discrepancies in the "official" figures. Collecting data on more than 40 categories of revenues and expenditures for 573 school districts for each of four years leaves room for error on our part; however, during the twelve months of analysis and data refinement since the raw information was collected in the field, the material has been subjected to as rigorous an attempt to assure accuracy as we could devise.

The Fiscal Context of Urban Education

Though raising adequate revenues for education is a serious problem in all areas of the nation, we have found that the fiscal crisis is most threatening in the larger cities of the nation. The trend in metropolitan development has left them with a less affluent population and a resource base that is failing to grow at a rate

sufficient to meet increasing needs. Because large urban areas have higher public service needs, a much lower proportion of their expenditures can be devoted to education than is true in suburban areas. The result is, of course, proportionately lower educational expenditures in cities than in their environs despite higher tax efforts in the cities. Unfortunately these problems are compounded by the inherently more costly nature of urban education: expenses are higher in big cities and pupil populations there include more children in need of expensive supplementary educational techniques. State regulations and state aid rather than compensating for these urban disadvantages often act to exacerbate them. This, then, is the fiscal context for our examination of the allocation of federal aid to education.

The Concept of Equity and Federal Aid

In selecting the areas of inquiry and the kind of analysis we would perform on the pattern of allocation of federal educational aid, the philosophy of the authors has played an important part. We feel it necessary, therefore, to make explicit our belief that one of the central questions to be asked about any governmental service is whether it is equitably distributed. In the case of state and local resources for education, we believe the distribution of services is basically inequitable.

The chief reason for this inequity is that the level of expenditures for education is determined primarily by the wealth of more than 17,000 individual public school districts in the nation. Local taxable resources, which provide more than half the revenue for running the public schools, vary immensely from district to district. For the children who live in those districts the quality of education varies accordingly. State

aid laws, which supply an additional 42 percent of school revenues, fail to overcome the disparities among districts and in many states actually reinforce them.

That the level of support devoted to one's schooling should vary markedly depending upon where one happens to live is, we believe, both rationally and ethically questionable. But when the variations in school spending are in inverse relationship to the incidence of the need for educational services, the inequity is compounded. As discussed in the previous chapter, the greatest need for educational resources exists where the handicaps to learning are greatest, namely among the poor, the handicapped, and the victims of prejudice and neglect. These groups tend to be concentrated where taxable resources are least available for education, notably, highly urbanized areas and particularly the large cities of the nation.

In analyzing the pattern of federal aid to education, therefore, we consider aid to be equitably distributed when it tends to offset disparities among school districts in regard to wealth (income and property valuation), when it provides assistance to urbanized areas in proportion to their fiscal disadvantages, and when it supplies proportionately more money to districts with higher numbers of educationally disadvantaged pupils.

Within that framework our findings indicate that:

(1) federal aid to education in the aggregate has only a slight equalizing tendency at best, and that within a number of metropolitan areas it displays distinctly disequalizing characteristics;

(2) the degree of equalization, where it does exist, is usually too small to offset pre-existing disparities among school districts, and

(3) a number of individual federal programs operate to help the rich districts get richer.

To be more specific, we found that:

a. Non-metropolitan areas, largely rural and small town in character, tend to receive more federal aid per pupil than do metropolitan areas.

b. While central cities get more total federal aid than their suburbs, the amount of federal aid is too small to offset the suburban advantage in local and state revenues. Suburbs averaged $100 more per pupil in total revenues than their core cities in four of the five states in the study.

c. With the exception of ESEA Title I, federal programs frequently provide more funds to suburban districts than to central city districts. Large cities appear to receive less money from programs such as ESEA II, ESEA III, NDEA III, and Vocational Education than their proportion of the states' enrollment would suggest.

d. Districts with lower income tend as a general rule to get somewhat more federal aid than districts with higher income, but there are numerous glaring exceptions. With regard to property valuation, federal aid shows no equalizing effect at all.

e. Somewhat more federal aid goes to districts with higher proportions of non-white students. However, the amounts are not in proportion to the magnitude of the added costs in educating the disadvantaged.

f. During the four-year time period under study, the amounts of aid received by local districts varied erratically. Almost half the metropolitan areas in the sample reported an actual decrease in revenues during the last year of the study.

g. ESEA I funds appear to go largely for ancillary programs and are not utilized to improve the central portion of the curriculum presented to disadvantaged children. The failure to concentrate funds on students most in need of compensatory education, and the widespread but improper use of Title I as general aid for system-wide purposes have diluted the effect of that program.

h. The amounts of federal aid are simply too small to be of anything but marginal help to financially imperiled educational systems. In comparison with total revenues from all sources which ran from $475 to $1,000 per pupil in the five states, we found total revenues from all sources averaging only $22 to $50 per pupil, or from 3.3 percent to 10 percent of average district revenues. These amounts are inadequate in face of the massive financial problems facing education.

Federal Funding for Education - the National Picture

Before we begin our discussion of the findings in detail, let us briefly trace the levels of federal educational funding and their relationship to educational expenditures for the nation as a whole. The growth of federal aid to education over the past thirteen years had been both significant and erratic (Table III-1).* Over that entire period, aid grew nearly six-fold, from just under $500 million to $2.9 billion. Between 1957 and 1964 federal funds almost doubled. They doubled again in one year, 1965-66, as a result of the passage of ESEA. However, during the last five years this overall growth pattern slowed and, if allowance is made for inflation, has actually declined in real terms. Furthermore, as a proportion of total educational revenues, federal aid rose consistently over a decade to a high of 8 percent in 1967-68, but has since declined steadily to 6.9 percent in 1970-71 (Table III-2).

*Tables in this chapter begin on page 54.

In any case, while the proportion of federal educational support has not been impressive, federal aid has exerted programmatic or financial leverage in certain areas of national policy. In the areas of vocational and agricultural education, and more recently, science and language instruction, federal funds have had an important impact. In some program areas such as language laboratories, federal funding constitutes the preponderant proportion of support. In short, federal aid to education provides a small but important proportion of total educational expenditures.

Federal Aid Distribution

An understanding of the levels of federal educational funding provides an orientation to an analysis of the impact of federal aid to education. Our concern, however, is with federal funds as they actually reach school districts. It is only there that the real impact of aid programs can be felt. Ideally, we would have liked to have reported finances by individual schools, but such data are currently unavailable. The statistics that follow, therefore, have been assembled from official reports of local districts to their state education departments. As a result, figures for the states of our samples (for example, the proportion of federal aid to total revenues) may differ somewhat from the amounts of federal aid reported for states as a whole by state education

departments. For one thing, certain direct state expenditures will elude us. For another, small federal programs or those administered by multi-district authorities may go unreported by individual school districts while state officials are able to report the state's total allotment. Yet on balance, the most important consideration was to report finances as close as possible to the point where they are transformed into real educational resources (services, equipment, and facilities), a procedure that we have adapted from the recent innovation in data collection, the Elementary and Secondary General Information Survey of the United States Office of Education (USOE).

A. Rural and Metropolitan

One of the most consistent patterns of impact that emerges from our data is that school districts in non-metropolitan areas, largely rural and small town in character, get more federal aid per pupil than do metropolitan areas (Table III-3). In California, Texas, and Michigan, non-metropolitan areas receive an average 50 percent more aid per pupil than do the metropolitan areas. The greater importance of federal aid in the rural areas is underscored by the fact that such aid provides a consistently larger proportion of educational revenues there than it does in metropolitan school districts. New York State comes as an exception to these findings because of the immense impact of New York City with its

high concentrations of families receiving welfare payments (AFDC) and thus qualifying for large amounts of ESEA Title I funds.*

B. Central City and Suburban

Examination of aid distribution within metropolitan areas -- between central cities on the one hand and their suburbs on the other -- reveals that while core cities receive more aid than their suburbs, the amounts of federal aid are insufficient to overcome the suburban advantages in locally raised revenues and state aid. With the exception of Michigan where there is a small ($17.00) revenue edge favoring central cities, suburbs have an average of $100 more to spend per pupil than do the central cities (Table III-4).

In Massachusetts, for example, central cities receive almost twice the dollar amount of federal aid per pupil as the suburbs ($69 and $38), and federal aid represents 10.2 percent of all central city revenues compared to 4.8 percent in suburbs. Despite this important difference, suburban school districts in that state still receive 15 percent ($104) more from all sources than do central city districts. This pattern is repeated in New York and Michigan. Thus, while central cities in three of the five states receive more federal aid both absolutely and proportionately than do their suburbs -- and essentially the same amounts in the remaining two states -- the general picture is one in which federal aid has failed to close the wide gap in revenues available to education between cities and their suburbs.

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*In determining the amount of Title I aid a district is eligible to receive, the major criterion used is the number of children whose parents receive Aid to Families with Dependent Children (AFDC).

But these data reflect only one dimension of the problem of raising sufficient revenues for education in cities. As we noted in Chapter II, the higher costs of providing comparable educational services in cities compound existing disparities.

In comparison with the non-metropolitan portions of the five states, central cities fare less well. Only in New York is there a clear central city advantage. In both California and Texas rural areas receive considerably more federal aid, and in Michigan the two areas receive virtually the same amounts. In regard to total revenues for education, there is no clear pattern, with non-metropolitan areas and central cities each leading the other in two states.

C. Title I of ESEA

As the largest federal aid to education program, ESEA Title I deserves special mention. In 1967, it amounted to $17.26 per pupil in the states in our sample. This amount was almost half (46 percent) of the total federal aid received. Even more than total federal aid, ESEA I has had a greater impact in rural areas than in metropolitan centers. In 1967, non-metropolitan areas received 85 percent more Title I funds than did metropolitan areas ($25.50 to $13.85). This difference more than accounts for the overall disparity between federal funds to metropolitan and non-metropolitan areas.

Within the states, Texas and New York are relatively high in the amounts of ESEA Title I received ($18.25 and $16.27) while the other three states received between $10 and $12.

When the distribution of ESEA I within metropolitan areas is examined, the central cities uniformly do well in relation to their surrounding communities. The only major exceptions are Houston, Dallas and Anaheim, which receive slightly less money per student in ESEA I than do the outside city areas.

D. Other Major Federal Programs

While the formula for the allocation of Title I funds works toward equity for central cities within SMSAs, the pattern of distribution of other federal education programs does not. The point is illustrated by the following example and by a survey of the 50 largest cities in the nation.

How a very wealthy suburb can garner substantially more federal aid than a neighboring deteriorating central city may be seen in the case of Schenectady and Niskayuna, New York (Tables III-5 and III-6). Schenectady, a central city whose depressed financial situation can be seen most readily in the fact that it qualifies for three times more Title I aid per pupil than Niskayuna, received only $60 per pupil from all federal programs. Niskayuna, probably the wealthiest suburb in the area, is able to take advantage of a sufficient range of federal programs to receive $84 per pupil, or 140 percent the amount of its proportionately poorer neighbor. State aid acts to reinforce the disparity. With a deteriorating fiscal situation and a school pop-

ulation with proportionately three times the number of disadvantaged pupils as its neighbor, the central city receives $100 less per pupil for education.

A study by the USOE examined entitlements under five federal programs to compare the share of state allocations going to large cities with the share of the state's student population in those cities. Except for Title I of ESEA, the study found that large cities were receiving less aid than their proportionate share of the state's population would imply. In other words, not only were federal aid programs not compensating for the special fiscal problems of cities discussed in Chapter II; federal aid programs were not even giving cities their proportionate share (Table III-7). In the 50 largest cities in the nation, with 21.3 percent of the pupil enrollment in their combined 28 states and 26.4 percent of the disadvantaged by Title I count, their receipts by program were 15.9 percent of Vocational Education funds, 16.2 percent of NDEA Title III (instructional equipment), 18.1 percent of ESEA II (textbooks and library resources), and 20.5 percent of ESEA Title III (supplemental services and centers). Only under ESEA I did the 50 cities receive funds equal to their percentage of state's student population.

The 25 largest cities of the nation received $280 million for the 6 major education programs. With 12 percent of the enrollments in their states, this represented 14.7 percent of the state's federal aid, but only 10.4 percent of aid other than Title I.

Federal Aid and the Capacity to Support Education

This section will examine the relationship of federal aid to some indicators of district capacity to support education:

median family income, state equalized property valuation, state aid, and total revenues for education.

A. Federal Aid and Median Family Income

Let us look first at the relationship of federal aid to average income among school districts within each of the five states. When simple correlation coefficients are computed, we find an inverse relationship (signified by the negative values in

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Correlations of Revenue from Major Federal Programs with Median Family Income in Districts of Metropolitan Areas

California	New York	Texas	Michigan	Massachusetts
-.27	-.31	-.67	-.17	-.30

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the table) in every state in the sample, indicating that where income is lower, federal aid is higher. A perfectly inverse relationship would have a -1.00 coefficient, so it is clear that only in Texas (-.67) is the relationship a particularly strong one.

We have looked more intensively into the income-aid relationship in the largest metropolitan area of each of the five states. As Table III-8 shows, in all states except Massachusetts the wealthiest suburban districts received the least federal aid per pupil and the poorest districts got the most when central cities

were not considered. However, if we look for a consistently equalizing effect the results are disappointing. In Houston and Detroit, for example, districts with moderately high family incomes get more federal aid than districts with moderately low income.

Even where the pattern is an equalizing one, it is frequently very mild in its effects. In the Boston metropolitan area, for instance, the wealthiest districts receive $29.00 in federal aid per pupil while the poorest receive $33.00, a difference of only $4.00 despite a nearly 50 percent differential in their average income levels.

Glaring examples of disequalization are found in each of the large metropolitan areas. Beverly Hills, the richest district in the Los Angeles area with a 1960 median family income of just under $12,000, received $17.00 per pupil in federal aid. The Hudson district, with about $6,700 in median family income,received only $14.00. In Massachusetts, Quincy (average income $6,800), which qualifies for large amounts of Impacted Areas (PL 874) aid, received $123.00 per pupil in federal money whereas Salem, with average income of under $6,000, received only $9.00 and Malden, with average income of $6,200, received only $18.00 in federal aid. In each of the cases mentioned above, the richer districts spend twice as much money from all sources per pupil than do the poorer districts.

Core cities received more federal aid than any other districts in three of the states, more than their low income

positions alone would suggest. This phenomenon is probably the result of the high proportion of welfare (AFDC) families residing in central cities. Yet even in those states where a relatively high amount of federal aid goes to the cities, the amount those cities spend per pupil from all revenue sources is consistently among the very lowest of the districts within the metropolitan area.

When individual federal aid programs are examined, even the mild overall equalization effect disappears except for Title I of ESEA. Taking one random district from each of the categories of median family income in the New York metropolitan area, we find that the pattern of distribution of individual programs defies simple explanation (Table III-9).

Without ESEA I, totals of federal aid display an essentially disequalizing tendency. With the exception of Bellport, richer districts get more money than do poorer ones. Individually, ESEA II and Lunch and Milk money are fairly evenly distributed among districts. Other programs have no ascertainable relationship to median family income.

B. Federal Aid and the Property Tax Base

The concept of equalization has traditionally been linked to the size of the real property tax base of school districts. The uneven location of real property has long been seen as a major cause of inequality in the educational opportunities provided in different

communities. To overcome these disparities, equalization formulas for the distribution of state educational aid typically allocate funds, to some greater or lesser degree, in inverse proportion to the level of property value per pupil. Aid ceilings, floors, and sharing ratios, however, often serve to defeat the nominal purposes of such programs. In addition, while property value may serve as a realistic yardstick of comparative fiscal ability among the relatively comparable school districts of the suburban and rural areas, students of public finance question its usefulness in measuring the entirely different fiscal position of large cities and highly urbanized areas. There, as we showed in Chapter II, the greater service needs of an urban population place a far higher demand upon the property tax base than is the case in less densely populated areas. Proportionately less locally raised revenue can, therefore, be devoted to education in the large cities than in the suburban and rural areas on an equal amount of taxable property.

Correlations of Revenue from Major Federal Programs with State Equalized Property Valuation in Districts of Metropolitan Areas

California	New York	Texas	Michigan	Massachusetts
-.18	-.03	-.21	.22	-.14

Given the shortcoming of valuation as a universal measure of capacity, it is still interesting to note whether federal aid offsets district property tax base disparities. The simple answer is that it does not. Correlation coefficients display no significant relationships. While four out of the five states do show an inverse relationship (federal aid is higher where valuation is lower) the values are so low as to be meaningless. In one state the relationship is even reversed: in Michigan, as we saw, more federal aid goes to districts that are richer.

In the five major metropolitan areas, federal aid has at best a neutral and at worst a disequalizing impact. Leaving central cities aside, in many instances the wealthier districts do better than other categories of suburban districts in garnering federal aid. In the New York, Houston, Detroit, and Boston areas more aid goes to the wealthiest category than to the poorest, and in the metropolitan areas of New York and Detroit, the richest group of districts outside the core cities receives more aid than any other category (Table III-10).

C. Federal Aid and State and Local Revenues

The relationship between federal and state aid is of great interest. Some observers have viewed federal aid as complementary to state aid, others as a measure to offset and redirect state priorities and patterns. Our results provide little support

for either view ; correlation coefficients showed virtually a random relationship except in Texas where there was a slight (.29) correlation with state aid patterns.

Correlations of Federal Revenue with State Aid to School Districts in Metropolitan Areas

California	New York	Texas	Michigan	Massachusetts
.07	-.18	.29	-.08	.06

The effect of federal aid when compared to local revenue is somewhat similar. Although the correlations are all negative, the degree of correlation is of an inconsequential order in all states except Texas, thus indicating that federal aid assists districts with less revenue for education as much as districts with greater funds for their schools.

Federal Aid and Non-White Enrollment

One measure of a district's educational resources is, as discussed in Chapter II, the proportion of educationally disadvantaged students in the schools of the system. As a proxy for such data, we have taken the district's proportion of non-white students. We

find that the flow of federal aid is significantly related to the proportion of non-white (primarily black, Puerto Rican, and Chicano) students in a school district. This relationship emerges from the correlation coefficients, which show a consistent positive relationship. The higher the proportion of non-white students, the more federal aid a district tends to receive. While the strength of the correlation is only of moderate power, collectively they are the strongest relationships that emerged from the variables tested.

Correlation of Revenue from Major Federal Programs with Proportion of Non-white Students in Metropolitan School Districts

California	New York	Texas	Michigan	Massachusetts
.33	.31	.21	.54	.43

To illustrate the phenomenon in more detail, we have compared the districts in the New York metropolitan area that have more than 15 percent non-white school populations with the average of their income quartiles. With the exception of one rather high income district in which rapid black immigration has been a very recent

characteristic, districts with large black pupil proportions receive far more federal aid than do other districts of comparable income. Title I of ESEA is the primary source of these higher revenues (Table III-12).

Offsetting the higher costs of education for the disadvantaged is an important form of equalization. Since non-white populations tend to have a significantly higher proportion of educationally disadvantaged pupils, this pattern of greater amounts of federal aid, notably Title I aid, to districts with larger non-white populations constitutes a distinct equalizing effect. Unfortunately, the amounts of added aid, roughly averaging $20 to $30 more per pupil, can have relatively little impact in comparison with the immense costs involved in effective education for the disadvantaged.

The Trend in Federal Aid

One important factor in understanding the impact of revenue is the pattern of aid over time and its effects on educational policy. When school districts are confident of steadily rising amounts of aid, those aid programs are likely to become an integral part of the total educational planning of administrators and school board members. However, where aid varies markedly from year to year, educational planners are handicapped by uncertainty as they develop next year's academic program, contract for facilities and equipment, and hire additional staff.

During the years covered by our study, federal aid reaching school districts has differed from year to year and has followed no

discernible pattern. While all the states and metropolitan areas in the sample show increased per pupil aid for the four-year period, in the last year of the period almost half the districts in metropolitan areas reported an actual decrease in per pupil amounts of aid. An additional fourth of the areas maintained the same level of aid, and only the remaining 30 percent showed an increase. Yearly revenues reported by the major cities in New York State illustrate the phenomenon (Table III-12).

Conclusion

This paper has examined the pattern of allocation of federal aid to education. The story in general is grossly disappointing. Rural areas receive far more aid proportionately than metropolitan areas, even more than central cities. Many individual aid programs give more help to rich districts than they do to poorer ones. Fund flows over time are so uneven, both within fiscal years and from year to year, that harried school planners often end up shunting federal aid funds to the least pressing, least important of their academic priorities. Most notable of all, the magnitudes of aid are so small -- averaging from $22 to $50 per pupil in the five states of the sample and from 3.3 percent to 10 percent of total revenues per pupil (Table III-14) -- that they must be found wanting when compared with the enormous tasks faced by, and inadequate money available for, public education. That central cities -- with their social, economic, and fiscal problems -- should be averaging significantly and consistently less in per pupil revenues than their less threatened suburbs is no less than a national disgrace

(Table III-4).

There are a few glimmers of light. Overall federal aid provides proportionately more aid to the fiscally threatened core cities than to their more favored environs. Federal aid tends to go in greater proportions to districts with lower than average incomes and higher than average proportions of non-white students. These tendencies toward equity, however, are far too little to overcome the basic maldistribution of educational finances in this nation.

It may be well, in conclusion, to remind ourselves of what that maldistribution implies, for statistical correlations and dollar amounts have a way of hiding as much as they convey. The real impact of inadequate and discriminatory funding levels is evidenced in high dropout rates, student performance below grade level, difficulties in attracting and holding qualified teachers, and overcrowded classes held in aged and dilapidated school buildings. The costs of these conditions are varied and immense. They are reflected in higher welfare, law enforcement, and job training expenses of the cities, in the flight of the middle class to the suburbs, and in the human tragedy and property destruction of urban unrest.

Remedying the problems on the educational agenda will not be easy. It will require the development and implementation of new approaches and special programs. Retrained and better trained teachers will be needed. New class configurations and clinical techniques may also be called for. A variety of strategies will be employed but one factor will be common to all: they will be costly. Until the federal government assumes the responsibility for providing an adequate and equitable pattern of aid to education, the crisis in American education will continue.

TABLE III-1

Revenues for Public Elementary and Secondary Schools
(in thousands)

School year	Total	Federal	State	Local
1957-58	$ 12,181,513	$ 486,484	$ 4,800,368	$ 6,894,661
1959-60	14,746,618	651,639	5,768,047	8,326,932
1961-62	17,527,707	760,915	6,789,190	9,977,542
1963-64	20,544,182	896,956	8,078,014	11,569,213
1965-66	25,356,858	1,996,954	9,920,219	13,439,686
1966-67	27,256,043	2,162,892	10,661,582	14,431,569
1967-68	31,092,400	2,472,464	12,231,954	16,387,982
1968-69	33,743,748	2,455,547	13,729,344	17,558,857
1969-70	38,192,011	2,767,045	15,627,751	19,797,215
1970-71	41,936,556	2,892,957	17,226,776	21,816,823

Source: National Education Association, Research Division, Estimates of School Statistics

TABLE III-2

Revenue Received from Federal, State, and Local Sources
for Public Elementary and Secondary Schools
(by percentage)

School Year	Federal Sources	State Sources	Local Sources
1957-58	4.0%	39.4%	56.6%
1959-60	4.4	39.1	56.5
1961-62	4.3	38.7	56.9
1963-64	4.4	39.3	56.4
1965-66	7.9	39.1	53.0
1966-67	7.9	39.1	53.0
1967-68	8.0	39.3	52.7
1968-69	7.3	40.7	52.0
1969-70	7.2	40.9	51.8
1970-71	6.9	41.1	52.0

Source: Committee on Educational Finance, National Education Association

TABLE III-3

Revenue Sources by Metropolitan
and Non-metropolitan Areas, 1967

State	Federal Aid	% of Total Revenue	State Aid	% of Total Revenue	Local Aid	% of Total Revenue	Total Revenue
California							
Metro	$37	5.1%	$272	37.3%	$420	57.5%	$730
Non-metro	54	8.4	237	37.0	350	54.6	641
New York							
Metro	35	3.4	484	47.3	504	49.3	1023
Non-metro	31	3.4	542	58.7	350	37.9	923
Texas							
Metro	42	8.8	207	43.4	228	47.8	477
Non-metro	63	11.8	250	46.7	222	41.5	535
Michigan							
Metro	18	2.7	264	39.6	385	57.7	667
Non-metro	30	4.8	305	48.5	294	46.7	629
Massachusetts							
Metro	39	5.9	126	19.0	498	75.1	663
Non-metro	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

TABLE III-4

Federal Aid and Total Revenue
By Central City, Outside Central City, and Non-Metropolitan Areas, 1967

State	Fed. Aid	Total Revenue	% Fed. Aid
California			
Central City	$39	$684	5.8%
Outside Central City	40	817	4.8
Non-Metro	54	641	8.4
New York			
Central City	68	876	7.7
Outside Central City	31	1037	3.0
Non-Metro	31	923	3.4
Texas			
Central City	38	479	7.9
Outside Central City	36	485	7.4
Non-Metro	63	535	11.8
Michigan			
Central City	29	683	4.2
Outside Central City	17	666	2.5
Non-Metro	30	629	4.8
Massachusetts			
Central City	69	675	10.2
Outside Central City	38	779	4.8
Non-Metro	n.a.	n.a.	n.a.

TABLE III-5

Summary of Revenue Sources for Schenectady and Niskayuna, New York, 1967

	Enroll-ment	ESEA I	Other Fed. Aid.	Total Fed. Aid From All Sources	State Aid	Total Revenue
Schenectady	12,480	$ 28	$ 32	$ 60	$ 454	$ 1069
Niskayuna	4,708	6	78	84	471	1173

TABLE III-6

Federal Revenue by Programs for Schenectady and Niskayuna, New York, 1967

	Schenectady		Niskayuna	
Federal Program	Amount	Per Pupil	Amount	Per Pupil
ESEA I	$ 348,800	$ 27.94	$ 26,300	$ 5.58
ESEA II	24,400	1.95	35,100	7.48
ESEA III			134,500	28.57
Total ESEA	373,200	29.90	195,900	41.61
NDEA III	19,600	1.57	21,700	4.60
NDEA V-A	5,500	0.44	5,200	1.10
Vocational Ed.	50,800	4.07	26,900	5.71
Public Law 874	143,300	11.48	103,100	21.89
School Milk & Lunch	27,500	2.20	28,100	5.96
Other Federal	129,100	10.34	16,005	3.40
Total Federal	749,000	60.01	396,905	84.30

Source: The University of the State of New York. The State Education Department Bureau of Educational Research. Albany, New York.

Central City Proportions of State's Federal Aid
and Enrollment for 25 Largest Cities, 1967*

Cities	Enrollment	ESEA I Eligibles	ESEA I Funds	City Proportion of State's Federal Aid (less Title I)	City Proportion of State's Federal Aid (6 major programs)	Federal Aid (in 1,000's
California						
Los Angeles	14.6%	20.6%	20.0%	6.7%	11.7%	$22,909
San Francisco	2.5	4.5	4.4	1.0	2.3	4,474
San Diego	2.8	3.1	3.0	0.8	1.7	3,235
Colorado						
Denver	19.4	29.1	26.0	15.1	18.5	5,079
Georgia						
Atlanta	10.5	6.9	5.7	8.7	7.0	4,375
Illinois						
Chicago	26.5	50.9	53.9	24.1	40.2	34,763
Louisiana						
New Orleans	13.0	11.7	15.0	15.2	15.1	6,775
Maryland						
Baltimore	24.3	50.8	49.7	21.6	38.3	9.357
Massachusetts						
Boston	8.7	26.1	24.6	4.5	14.6	4,928
Michigan						
Detroit	14.8	33.3	35.0	17.3	26.5	16,27
Minnesota						
Minneapolis	8.5	12.6	11.2	11.0	11.1	4,17
Missouri						
St. Louis	13.9	18.9	19.4	12.1	16.1	7,09
New York						
New York	33.3	63.8	61.4	23.2	48.7	82,93
Buffalo	2.3	4.5	4.3	2.8	3.8	6,54
Ohio						
Cleveland	8.2	14.3	14.7	6.6	10.3	7,81
Cincinnati	3.8	8.5	8.6	4.6	6.4	4,87
Pennsylvania						
Philadelphia	12.7	25.4	24.6	17.8	21.5	19,15
Pittsburgh	7.6	6.9	6.6	12.1	9.1	8,13
Tennessee						
Memphis	14.7	9.3	9.3	5.2	7.6	3,81
Texas						
Houston	10.9	5.2	5.1	4.2	4.7	6,16
Dallas	5.9	3.8	3.7	2.4	3.1	4,03
San Antonio	5.3	4.4	4.3	5.6	4.9	6,46
Washington						
Seattle	13.5	15.7	14.8	13.5	13.9	4,48
Wisconsin						
Milwaukee	13.3	18.4	17.8	13.2	15.4	4,72
Average (unweighted)	12.0	18.7	18.4	10.4	14.7	

*Excluding District of Columbia

**ESEA I, II, III, NDEA III, Vocational Education, PL 874

TABLE III-8

Comparison of Federal Aid Per Pupil Received by School Districts
By Income Categories for Major Metropolitan Areas, 1967

School Districts	Los Angeles		New York		Houston		Detroit		Boston	
	range median family income	federal aid	range median family income	federal aid	range median family income	federal aid	range median family income	federal aid	range median family income	federal aid
High	$12,000 8,600	$16	$17,500 10,500	$19	$8,900 7,200	$16	$14,700 8,700	$ 3	$9,400 9,000	$29
Moderately High	8,600 7,400	18	10,500 8,000	31	7,200 6,300	21	8,700 7,400	18	9,000 7,300	31
Moderately Low	7,400 6,400	26	8,000 6,500	32	6,300 5,000	19	7,400 6,600	12	7,300 6,300	39
Low	6,400 6,100	54	6,500 5,500	46	5,000 3,700	53	6,600 5,600	55	6,300 5,900	34
Central City	6,896	37	6,091	78	5,902	21	6,069	80	5,747	69

TABLE III-9

Federal Aid by Program for Five School Districts in New York Metropolitan Area, 1967
(average per pupil)

Districts		Federal Programs: ESEA I	ESEA II	ESEA III	NDEA III	NDEA V-A	PL 874	Voc Ed	Lunch-Milk	Total Without ESEA I	Total
High											
Great Neck	(14,451)	4.66	1.26	11.31	.32	.00	.00	.62	3.86	17.57	22.23
Moderately High											
Huntington	(8,988)	22.60	2.40	2.22	1.45	.00	2.22	2.04	5.86	16.19	38.79
Moderately Low											
Hicksville	(7,908)	1.62	2.33	.00	1.64	.36	3.41	.75	4.07	12.56	14.18
Low											
Bellport	(6,237)	26.44	1.80	1.35	6.36	.70	29.23	.10	5.71	45.25	71.69
New York City	(6,091)	67.78	1.78	1.59	1.05	.34	.00	.57	4.99	10.32	78.10

TABLE III-10

Comparison of Federal Aid Per Pupil Received by School Districts
Ranked by Valuation Categories for Major Metropolitan Areas

School Districts	Los Angeles		New York		Houston		Detroit		Boston	
	range A.V.*	federal aid	range A.V.	federal aid	range A.V.	federal aid	range A.V.	federal aid	range A.V.	fed a
High	$ 84700 38300	$ 19	$ 77800 52000	$ 38	$ 140700 79000	$ 23	$ 34700 23000	$ 40	$ 56400 36000	$
Moderately High	38300 10000	23	52000 23000	33	79000 53500	26	23000 10000	14	36000 22500	
Moderately Low	10000 5500	23	23000 14000	30	53500 16500	26	10000 8000	22	22500 18000	
Low	5500 4600	27	14000 10500	29	16500 12000	21	8000 5200	16	18000 13500	
Central City	16908	37	41141	78	37533	21	16665	80	14021	

* Range of State Equalized Valuation

TABLE III-11

Districts with at Least 15% Non-white Students
By Income Quartiles

Districts by Income Category	% Non-white	Total Federal Aid of District	Average Federal Aid of Quartile*
Moderately High			
Greenburgh ($9700)	35%	$13	$31
New Rochelle ($8131)	16	51	31
Moderately Low			
Freeport ($7,915)	17	49	32
Hempstead ($7,455)	65	80	32
Mt. Vernon ($6,873)	39	68	32
Copiague ($6,479)	27	33	32
Low			
Bellport ($6,237)	16	73	46
Central City			
New York City ($6,091)	40	78	n.a.

*Quartiles taken from Table II-9

TABLE III-12

Revenues From Major Educational Aid Programs for New York State Central Cities, 1965-68
(average per pupil)

	New York	Buffalo	Rochester	Albany Schenectady Troy	Syracuse	Utica-Rome	Binghamton
1965	$ 7	$ 4	$ 5	$ 16	$ 5	$ 48	$ 5
1966	31	39	28	49	30	68	12
1967	79	79	110	44	64	89	32
1968	40	52	99	73	75	71	24

TABLE III-13

Comparative Data on the Allocation of ESEA Title I Funds
in New York State, 1966-69

Fiscal Year	Maximum Basic Grant	State Allocation	Pro-ration Factor	Average Net Current Expense	Pro-rated Per Pupil	Total Number of Poverty Eligibles
1966	$109,667,000	$109,667,000	1.00	$366	$366	299,962
1967	159,451,000	111,091,000	.70	393	274	405,584
1968	195,228,000	115,776,000	.59	417	247	468,629
1969	265,611,000	113,601,000	.43	468	200	567,706

Source: Statement presented by Irving Ratchick, Coordinator of Title I, ESEA, New York State Education Department to the House Education and Labor Committee, Washington, D.C. on H.R. 514 on March 6, 1969.

TABLE III-14

Revenue Sources by States, 1967

State	Total Fed. Aid	% of Total Revenue	State Aid	% of Total Revenue	Local Aid	% of Total Revenue	Total Revenue
California	$ 40	5.6%	$ 264	37.0%	$ 410	57.4%	$ 714
New York	34	3.4	501	50.4	459	46.2	994
Texas	50	10.0	224	44.8	226	45.2	500
Michigan	22	3.4	277	42.4	354	54.2	654
Massachusetts	39	5.9	123	18.6	501	75.6	663